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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,830	12/11/2003	Masahiro Kuroki	14470.21US01	1985

7590 05/03/2006  
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EXAMINER

SPISICH, GEORGE D

ART UNIT	PAPER NUMBER
3616	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/734,830	<b>Applicant(s)</b> KUROKI ET AL.	
	<b>Examiner</b> George D. Spisich	<b>Art Unit</b> 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8 and 14-16 is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☒ Claim(s) 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama et al. in view of Fukuda et al. (USPN 5,515,607) and in further view of Sato et al. (USPN 4,360,224) cited in the First Office Action.

Uchiyama et al. has been discussed in the First Office Action and discloses an ATV having frame, a suspension arrangement and a powertrain. Uchiyama et al. does not disclose the relative position of the differential with respect to a reduction gear mechanism or a suspension arrangement having a shock absorber linked to left and right suspension arms. Examiner points out that Claim 17 does not relate any detail or position of the suspension to the differential as in claim 1 (original and currently amended), therefore, the suspension detail may be of a "separated" wheel set.

Fukuda et al. teaches what is basic and well known in the art that the arrangement of the power train elements, which include a transmission, a reduction gear mechanism and a differential mechanism may be in a variety of relationships with

respect to one another. Fukuda et al. discloses the differential mechanism (10) arranged "below" the remaining elements of the drive train.

Sato et al. discloses (see Fig. 2 and Fig. 3) a suspension having left (21,17) and right (22,18) suspension arms mounted on the vehicle frame in a movable manner, each suspension arm being attached with a wheel (41,40) and the suspension arms each include a front (22, 21) and rear section (17,18) all being rotatably connected to the vehicle frame (either directly or indirectly) and a shock absorber (16) linked to the left and right suspension arms (as this elements is operatively connected and linked to the arms). The front sections and the rear sections are rotatable about a common axis, and each front section includes a front fitting part and each rear section includes a rear fitting part, the front fitting parts are arrangement above the rear fitting parts. As presently claimed, the claims do not require that the common axis also be described by the front fitting parts being arranged above the rear fitting parts as claims 18 and 19 depend from claim 17.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a drive train including a transmission, reduction gear mechanism and differential mechanism and deliver transmitting drive force to the wheels further having the differential arranged below the other two as taught by Fukuda et al. in the vehicle of Uchiyama et al. as it is well known in the art to arrange the elements of the drive train in this or any feasible manner and further modify the suspension (front) of Uchiyama et al. to include a pivoted suspension arm arrangement

having a common pivot axis and as taught by Sato et al. so as to provide a suspension that functions to effectively absorb shocks.

Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda et al. (USPN 5,156,070) in view of Peterson (USPN 5,364,114).

Fukuda et al. discloses a vehicle inherently having a suspension and wheels. Fukuda et al. teaches what is basic and well known in the art that the arrangement of the power train elements, which include a transmission, a reduction gear mechanism and a differential mechanism may be in a variety of relationships with respect to one another. Fukuda et al. discloses the differential mechanism (10) arranged "below" the remaining elements of the drive train. Again, Examiner points out that Claim 17 does not relate any detail or position of the suspension to the differential as in claim 1 (original and currently amended), therefore, the suspension detail may be of a "separated" wheel set.

Peterson discloses a suspension arrangement having left and right suspension arms mounted in a movable manner to the vehicle frame and further comprising a swing mechanism (49) operatively connected to the vehicle frame. The suspension arms each include a front section and a rear section, both rotatably connect to the vehicle frame. A shock absorber (46) linked to the right and left suspension arms. The front sections and rear sections are rotatable about a common axis and when viewed as an upper and lower suspension arm include a front fitting part arranged above the rear fitting part. As presently claimed, the claims do not require that the common axis also be

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described by the front fitting parts being arranged above the rear fitting parts as claims 18 and 19 depend from claim 17.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the suspension arrangement of Peterson in the vehicle of Fukuda et al. having the particular powertrain and differential relationship as the suspension of Peterson relates the left side of the suspension with the right side of the suspension so as to effectively absorb shock and stabilize the vehicle.

### ***Allowable Subject Matter***

Claims 1-8 and 14-16 are allowed.

Claim 20 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

With respect to Applicant's statement that claim 17 is similar to claim 5, Examiner agrees but points out that claim 17 does not include the suspension arm to differential relation as in claim 1 and therefore claim 17 is different in scope than claim 5. For this reason, the new rejection is made and making this Action Final is proper.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George D. Spisich whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday 9:00 to 6:30 except alt. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George D. Spisich  
April 28, 2006



PAUL N. DICKSON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600